Volunteer Engineers Working To Help Communities Recover

Full Mitigation Best Practice Story

State-wide, North Carolina

The State of North Carolina - During late September 1999, Hurricane Floyd devastated much of eastern North Carolina with heavy rains, resulting in record flooding. Three major rivers and many creeks rose above previous flood levels and in some locations the waters breached their dams. The number of structures, residential and commercial, damaged or destroyed was so great that it exceeded the capability of community inspectors to conduct damage assessments. "The communities couldn't afford consultants," said John Gerber, an engineer with the National Flood Insurance Program (NFIP). "Yet they've got to know if their properties can be restored to meet the local building code."

A group of North Carolina professional engineers volunteered to conduct free assessments of flood-damaged properties for local communities who are recovering from the devastation of Hurricane Floyd. The volunteer engineers look for and tag buildings that sustained "substantial damage," defined as dollar amount damage that exceeds 50 percent of its pre-flood value. The engineers, who are all members of the Professional Engineers of North Carolina, received special training to help the homeowners assess their properties.

Since then, more than 100 engineers have conducted thousands of assessments. The volunteer engineers often work 12-hour days, in areas rife with snakes and vermin. They assess hurricane damage "down east" during the day, staying in campers and old hunting lodges or staying with family or with friends of friends at night.

The magnitude of damage caused by Floyd is great and the engineers help quantify that damage. The estimated private-sector value of their work is more than $100,000. An additional benefit of this volunteer effort is that with timely inspections the victims had the ability to recover much more quickly.

Activity/Project Location

Geographical Area:	**State-wide**
FEMA Region:	**Region IV**
State:	**North Carolina**

Key Activity/Project Information

Sector:	**Private**
Hazard Type:	**Flooding; Hurricane/Tropical Storm**
Activity/Project Type:	**Building Codes; Floodplain Management**
Activity/Project Start Date:	**09/1999**
Activity/Project End Date:	**11/1999**
Funding Source:	**Private funds**
Funding Recipient:	**Property Owner - Residential**
Funding Recipient Name:	**communities, local home and business owners**

Activity/Project Economic Analysis

Cost:	**$100,000.00 (Estimated)**

Activity/Project Disaster Information

Mitigation Resulted From Federal Disaster?	**Yes**
Federal Disaster #:	**1292 , 09/16/1999**
Value Tested By Disaster?	**No**
Repetitive Loss Property?	**Unknown**

Reference URLs

Reference URL 1:	**http://www.floodsmart.gov/floodsmart/pages/index.jsp**
Reference URL 2:	**http://www.nhc.noaa.gov/**

Main Points

- A group of North Carolina professional engineers volunteered conducted free assessments of flood-damaged properties for local communities.
- The volunteer engineers look for and tag buildings that sustained "substantial damage," defined as dollar amount damage that exceeds 50 percent of its pre-flood value.
- More than 100 engineers have conducted thousands of assessments. The volunteer engineers often work 12-hour days, in areas rife with snakes and vermin. They assess hurricane damage "down east" during the day, staying in campers and old hunting lodges or staying with family or with friends of friends at night.